

## ABSTRACT

An object of the present invention is to provide a nonaqueous electrolyte battery which restrains swelling of the battery during high-temperature storage and is excellent in battery performance after storage.

The invention is characterized by a specific constitution of a nonaqueous electrolyte and a combination thereof with a positive active material having specific crystal structure and composition. Namely, it is characterized by a nonaqueous electrolyte battery containing a positive electrode, a negative electrode, and a nonaqueous electrolyte, wherein the above nonaqueous electrolyte contains at least a cyclic carbonate having a carbon-carbon  $\pi$  bond and the above positive electrode contains a positive active material comprising a composite oxide represented by a composite formula:  $Li_xMn_aNi_bCo_cO_2$  (wherein  $0 \leq x \leq 1.1$ ,  $a+b+c=1$ ,  $|a-b|<0.05$ ,  $0 < c < 1$ ) and having an  $\alpha$ - $NaFeO_2$ -type crystal structure.